

CLAIMS

1. A method for manufacturing a sheet-shaped body in which a powder particle layer is sandwiched between a base sheet to which a bonding agent is applied and a covering sheet so as to be bonded into an integral body, comprising the steps of:

shifting the base sheet, the powder particle layer and the covering sheet, with each of the sheets and the layer being held on the respective roller faces; and

bonding the base sheet, the powder particle layer and the covering sheet into an integral form, after the powder particle layer has been transferred onto the base sheet.

2. The method for manufacturing the sheet-shaped body according to claim 1, further comprising the step of:

transferring the powder particle layer onto the base sheet, with the powder particle layer being shifted in the same direction as the base sheet.

3. The method for manufacturing the sheet-shaped body according to claim 1 or 2, wherein

shifting speeds of the base sheet, the powder particle layer and the covering sheet are set to the same or the shifting speed of the powder particle layer is made slower.

4. The method for manufacturing the sheet-shaped body according to

any of claims 1 to 3, wherein

the process for transferring the powder particle layer on the base sheet and the process for bonding the covering sheet are carried out on the same roller face.

5. The method for manufacturing the sheet-shaped body according to any of claims 1 to 4, wherein

the powder particle layer is constituted by a highly absorbent resin particle layer.

6. A device for manufacturing a sheet-shaped body in which a powder particle layer is sandwiched between a base sheet to which a bonding agent is applied and a covering sheet so as to be bonded into an integral body, the device comprising:

a receiving and transferring roller that shifts the base sheet with the base sheet being held on the roller face thereof;

a temporary receiving roller that transfers the powder particle layer onto the base sheet, while shifting the powder particle layer, with the powder particle layer being held on the roller face thereof; and

a contact-bond fixing roller that bonds the base sheet, the powder particle layer and the covering sheet into an integral form, while shifting the covering sheet with the covering sheet being held on the roller face thereof.

7. The device for manufacturing the sheet-shaped body according to

claim 6, wherein

surface peripheral velocities of the receiving and transferring roller, the temporary receiving roller and the contact-bond fixing roller are set to the same speed, or the surface peripheral velocity of the temporary receiving roller is set to be slower.

8. The device for manufacturing the sheet-shaped body according to claim 6 or 7, wherein

concave grooves which receive the powder particle layer and shift the powder particle layer being held thereon in a layer form are formed on the roller face of the temporary receiving roller.

9. The device for manufacturing the sheet-shaped body according to claim 7 or 8, wherein

a guide member for holding the powder particle layer is installed in a manner so as to face the roller face of the temporary receiving roller.

10. The device for manufacturing the sheet-shaped body according to any of claims 6 to 9, wherein

at least one of the contact-bond fixing roller and the receiving and transferring roller is a heat roller.

11. The device for manufacturing the sheet-shaped body according to any of claims 6 to 10, wherein

a press contact roller which presses the covering sheet to be in contact

with the base sheet on the receiving and transferring roller is installed before the contact-bond fixing roller.

12. The device for manufacturing the sheet-shaped body according to any of claims 6 to 11, wherein

a protective plate member which prevents the powder particle layer from flowing is attached to the receiving and transferring roller.

13. The device for manufacturing the sheet-shaped body according to claim 12, wherein

the distance between the roller face of the receiving and transferring roller and the protective plate member is set in a range from 0.5 to 5 mm.

14. The device for manufacturing the sheet-shaped body according to any of claims 6 to 13, wherein

the powder particle layer is a highly water-absorbent resin particle layer.

15. A method for manufacturing a disposable absorbent article, wherein

the sheet-shaped body manufactured by the manufacturing method according to claim 5 is sandwiched between a liquid-permeable top sheet and a liquid-impermeable back sheet to be bonded into an integral form so that the disposable absorbent article is produced.